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THE STUDY OF PRIMITIVE MUSIC

By CHARLES K. WEAD

In an old number of the *American Anthropologist* (January, 1889) I have chanced on an article by Dr Boas, which has a suggestiveness and significance in a direction quite different from that considered by the author. In opposition to some then current loose theories of "alternating sounds" and "sound blindness," he pointed out the great liability we are under of misunderstanding a new word by failing to perceive the peculiar character of each phonetic element; this point he illustrated by instances from his own notebook of Eskimo words, and added that in the field-notes of even well-trained philologists their misspellings of strange words betray their own nationality. Other easily accessible illustrations we may find in the various spellings of the same name in the Index to the *Documents Relating to the Colonial History of New York*, or in the changes that English words undergo when spoken by natives of Hawaii, or in the rival spellings Chippeway and Ojibwa. Clearly the trouble comes, as Boas pointed out, from the difficulty, first, of apperceiving the elements of the word, and, second, of expressing them in proper notation. Our standards both of recognition and expression are incommensurable with those of the stranger; so the transliteration may be made approximately in various ways, and is at best imperfect even with the copious scientific alphabets.

All these remarks concerning strange words seem nowadays mere truisms; but the more obvious they seem to anyone, the more strange it should appear to him that the parallel truths concerning music are so generally ignored or even denied. The purpose of this paper is to consider some of the difficulties

connected with the hearing and noting of strange music, and some helps in overcoming these difficulties.

The observer of savage or other strange music, *e. g.* a song, hears a succession of sounds differing in pitch, duration, or force, or probably in all three respects and in others not necessary now to consider; and within the limits of the voice the possible variation in each characteristic is continuous,—the sound may be of any force, length, or pitch; so the sounds not being limited in number like consonants or chemical atoms, it is a matter of extreme difficulty to observe and estimate them quantitatively, and, if estimated, the observer has probably no suitable notation for recording his results. At present the familiar symbols for noting the force and length of the notes are generally sufficient to mark the rhythm as closely as it can be observed; but at Chicago some savage rhythms completely baffled the musicians who attempted to note them down. To give the pitch, the general practice of ethnologists seems to be to learn the song, fix on the keynote from the feeling instinctive to a European musician that the notes group themselves in familiar relations around one which is peculiarly a tone of repose, and then transpose the whole so that in writing on the staff there will not be many sharps or flats in the signature: at some point in the process all the notes that do not belong exactly to the scale on the chosen keynote, with its limited number of steps, are changed to the nearest scale-note, though sometimes accidental semitones are allowed. The song thus noted contains also the observer's errors, and his interpretations; it has now many features of the dress of civilization, but its savage nature is not completely disguised; so, to permit it to enter good society, Mr Sousa will fit it out with full harmonies for a brass band¹; or (dropping the figure) Professor Stumpf² will demand that it be "intelligible as music," and arbitrarily change the notes as published so as to satisfy his notions of key. Why

¹ *National, Patriotic, and Typical Airs*, 1890.

² *Viertelj. für Musikw.*, 1892.

not as well try to make Zulu words "intelligible as German" from the collocations of the letters in transliteration?

The use of a phonograph has often been proposed to avoid the errors of field observation and to allow of the transcription of melodies under conditions favorable to scientific accuracy. It is found, however, that great care is needed to avoid introducing various new errors; and unless the driving power is uniform the determination of pitch is very uncertain. For this reason the cylinders of Zulu melodies collected by Dr Fewkes in the early days of field phonographic work were imperfect, and Mr Gilman's thorough examination of them and his published transcriptions (1891) are unsatisfactory as to results, though his method of work was distinctly in advance of any former work. In this connection it is pertinent to add that travelers who get phonographic records should aim to obtain several records of any important song from a single individual, and other records of the same song from other people; only by a comparison of such supposed duplicates will it be possible to tell how much constancy a tune has and what its average constitution is.

If any reader of these pages has the opportunity to observe unusual music, as among Indians, Negroes, uncultivated singers, etc., his observations will be far more interesting and valuable from a scientific point of view if he can adopt two suggestions:

First, train his ear to recognize and *estimate* fractions of a semitone; this may conveniently be done as follows: Paste on the finger-board of a violin a paper scale divided into equal parts, as tenths of an inch, and determine by ear or by comparison with a well-tuned piano at what points the strings must be stopped to produce the notes of the chromatic scale; the average distance between these points will be about half an inch; since, however, the string may be stopped at any intermediate point, notes not in the scale can be produced and their pitch fixed to a tenth of a semitone; so the ear may be trained to estimate both minute intervals and deviations from the piano scale: a bit of wood will be

better than the broad finger for stopping the string with exactness. One German musician trained himself to estimate with certainty at public performances deviations of a tenth of a semitone.

The second suggestion is that the observer record his results, not on the ordinary staff with its lines sometimes three and sometimes four semitones apart, but on a chromatic staff having thirteen equally-spaced lines to the octave; for convenience those lines may be drawn heavier which correspond to the white keys of a piano or the syllables of the diatonic scale; all sounds agreeing exactly in pitch with piano notes will then be written on the lines, while in the spaces notes of intermediate pitch will be properly interpolated. This staff or chart, used by the phonologist Steele a century ago, and invented by patentees and scientific men several times since, is the only one fitted for scientific use in the study of non-harmonic music, for it complies with the demands both for mathematical precision and for musical intelligibility, and the records on it can readily be translated into sound, as with the violin or voice, or to the nearest semitone with the piano. To familiarize oneself with this staff, it is a good exercise to lay down on it the "just" diatonic scale, the Siamese scale of seven equal steps, and any other curious scales the student may know of.

In conclusion: It is sometimes asserted that the deviations of, *e. g.*, Indian music from our scale are immaterial and of no significance: perhaps so, but the people who say so furnish no facts, and ask to have their dictum accepted. Unquestionably the deviations of some Negro songs and of many Oriental tunes are material and intentional, and are as significant of history and relationship as the silent letters in many English words. If, however, the deviations in the tunes of any people should be proved to be non-significant, we shall learn therefrom that the enjoyment of music is not generally dependent on that most modern demand of the harmonic musician,—accuracy of intonation,—and that the simple music of primitive peoples does not need the firm

harmonic foundations of German folk-song or modern music. In either case we may be sure the careful study of these deviations will not only train the observer, but ultimately bring new and valuable truths to light. And in all work on alien music it is to be hoped the field-worker will take warning from the experience in a similar field of the distinguished ethnologist cited at the beginning of this paper, and strive always to obtain and to report the objective truth, free from all subjective interpretations.